

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	2
Scenario Name	Comerc Thin; Est Intr Grass
Scenario Description	Commercial thinning of an existing stand of trees followed by establishment of introduced grasses.
Before Practice Situation	10-acre forest stand that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Since thinning is done commercially, no harvesting costs are incurred. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of cool-season grasses and legumes will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,241.40	\$324.14
Equipment/Installation	\$419.46	\$41.95
Labor	\$665.76	\$66.58
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,326.62	\$432.66

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	10	\$50.20
Materials	93	Perennial Ryegrass (Lolium perenne)	Introduced Perennial Grasses and shipping.	Pound	\$1.94	40	\$77.60
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	\$2.04	40	\$81.60
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	20	\$52.00
Materials	104	Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	\$4.15	60	\$249.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	1
Scenario Name	Comerc Thin; Est NTV Grass
Scenario Description	Commercial thinning of an existing stand of trees followed by establishment of native grasses.
Before Practice Situation	10-acre forest stand that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Since thinning is done commercially, no harvesting costs are incurred. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of native warm-season grasses will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,096.91	\$409.69
Equipment/Installation	\$419.46	\$41.95
Labor	\$665.76	\$66.58
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$5,182.13	\$518.21

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	10	\$50.20
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	33	\$509.19
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	33	\$416.79
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	33	\$389.73
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	6
Scenario Name	Est Intr Grass
Scenario Description	Establishment of introduced grasses into an existing stand of trees that is already at an adequate density.
Before Practice Situation	10-acre forest stand that has a basal area of 50 sq. ft. per acre. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage.
After Practice Situation	The soil is prepared for planting using chemical and mechanical means, then a mix of cool-season grasses and legumes will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,191.20	\$319.12
Equipment/Installation	\$419.46	\$41.95
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$3,610.66	\$361.07

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	93	Perennial Ryegrass (Lolium perenne)	Introduced Perennial Grasses and shipping.	Pound	\$1.94	40	\$77.60
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	\$2.04	40	\$81.60
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	20	\$52.00
Materials	104	Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	\$4.15	60	\$249.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	5
Scenario Name	Est NTV Grass
Scenario Description	Establishment of native grasses into an existing stand of trees that is already at an adequate density.
Before Practice Situation	10-acre forest stand that has a basal area of 50 sq. ft. per acre. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage.
After Practice Situation	The soil is prepared for planting using chemical and mechanical means, then a mix of native warm-season grasses will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,046.71	\$404.67
Equipment/Installation	\$419.46	\$41.95
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,466.17	\$446.62

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	33	\$509.19
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	33	\$416.79
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	33	\$389.73
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	9
Scenario Name	Est Trees
Scenario Description	Establishment of trees into an existing pasture that contains adequate native or introduced forage.
Before Practice Situation	10-acre pasture with suitable forage for livestock. There is very little protection from the elements (sun, wind, etc.) available to the livestock. Additionally, there are no long-term wood products being produced. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Livestock Production Limitation - Inadequate Livestock Shelter.
After Practice Situation	The site will be prepared using Tree/Shrub Site Preparation (490), if needed, and then 200 pine trees per acre will be planted, providing shade and wind protection to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$940.00	\$94.00
Equipment/Installation	\$153.84	\$15.38
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$1,093.84	\$109.38

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	1513	Tree, conifer, seedling, bare root, 1-1	Bare root conifer trees, 1-1 (2 years old). Materials only.	Each	\$0.39	2000	\$780.00
Materials	1586	Wire flags	Small vinyl flags attached to wire stakes, typically, 36" in length, for marking tree rows	Each	\$0.08	2000	\$160.00
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$19.28	4	\$77.12
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	4	\$17.52
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	8
Scenario Name	Est Trees & Intr Grass
Scenario Description	Establishment of trees and introduced grasses and legumes into a field that contains neither suitable forage nor suitable tree cover for a silvopasture system. 10-acre old field without suitable forage for livestock nor tree cover. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
Before Practice Situation	
After Practice Situation	The site will be prepared using chemical and mechanical means, a mix of cool-season grasses and legumes will be established, and then 200 pine trees per acre will be planted, providing forage to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,131.20	\$413.12
Equipment/Installation	\$514.10	\$51.41
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$4,645.30	\$464.53

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	93	Perennial Ryegrass (Lolium perenne)	Introduced Perennial Grasses and shipping.	Pound	\$1.94	40	\$77.60
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	\$2.04	40	\$81.60
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	20	\$52.00
Materials	104	Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	\$4.15	60	\$249.00
Materials	1513	Tree, conifer, seedling, bare root, 1-1	Bare root conifer trees, 1-1 (2 years old). Materials only.	Each	\$0.39	2000	\$780.00
Materials	1586	Wire flags	Small vinyl flags attached to wire stakes, typically, 36" in length, for marking tree rows	Each	\$0.08	2000	\$160.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$19.28	4	\$77.12
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	4	\$17.52
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	7
Scenario Name	Establish trees and native grass
Scenario Description	Establishment of trees and native grasses into a field that contains neither suitable forage nor suitable tree cover for a silvopasture system.
Before Practice Situation	10-acre old field without suitable forage for livestock nor tree cover. There is very little available forage for livestock, due to undesirable species in the understory. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The site will be prepared using chemical and mechanical means, a mix of native warm-season grasses will be established, and then 200 pine trees per acre will be planted, providing forage to livestock and wildlife, and, in time, producing a viable wood products crop. Per the conservation practice standard, livestock grazing will be deferred until the trees reach adequate height to resist damage, or use exclusion measures are established. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$5,506.71	\$550.67
Equipment/Installation	\$514.10	\$51.41
Labor	\$0.00	\$0.00
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$6,020.81	\$602.08

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	33	\$509.19
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	33	\$416.79
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	33	\$389.73
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	1586	Wire flags	Small vinyl flags attached to wire stakes, typically, 36" in length, for marking tree rows	Each	\$0.08	2000	\$160.00
Materials	1509	Tree, hardwood, seedling or transplant, bare root, 6-18"	Bare root hardwood trees 6-18" tall. Materials only.	Each	\$0.65	2000	\$1,300.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	963	Tractor, agricultural, 60 HP	Agricultural tractor with horsepower range of 50 to 90. Equipment and power unit costs. Labor not included.	Hour	\$19.28	4	\$77.12
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	1600	Mechanical tree planter	Mechanical tree planter. Requires a pulling unit of either tractor or small dozer depending upon site conditions. Does not include labor.	Hour	\$4.38	4	\$17.52
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30

Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	4
Scenario Name	Noncomerc Thin; Est Intr Grass
Scenario Description	Non-commercial thinning of an existing stand of trees followed by establishment of introduced grasses.
Before Practice Situation	10-acre forest stand that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned non-commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of cool-season grasses and legumes will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$3,241.40	\$324.14
Equipment/Installation	\$748.26	\$74.83
Labor	\$2,208.36	\$220.84
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$6,198.02	\$619.80

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	10	\$50.20
Materials	93	Perennial Ryegrass (Lolium perenne)	Introduced Perennial Grasses and shipping.	Pound	\$1.94	40	\$77.60
Materials	92	Orchard Grass (Dactylis glomerata)	Introduced Perennial Grasses and shipping.	Pound	\$2.04	40	\$81.60
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Materials	112	Red Clover (Trifolium pratense)	Introduced Legumes and shipping.	Pound	\$2.60	20	\$52.00
Materials	104	Alfalfa (Medicago sativa)	Introduced Legumes and shipping.	Pound	\$4.15	60	\$249.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	60	\$328.80
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$25.71	60	\$1,542.60

Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76
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Scenario Worksheet

Practice and Scenario Description:

Information Type	Data
Region	New England
State	Connecticut
Discipline Group	Forestry
Practice Code/Name	381 - Silvopasture
Scenario ID	3
Scenario Name	Noncomerc Thin; Est NTV Grass
Scenario Description	Non-commercial thinning of an existing stand of trees followed by establishment of native grasses.
Before Practice Situation	10-acre forest stand that is overstocked, with a basal area of 100 sq. ft. per acre. There is very little available forage for livestock, due to the dense shade of the tree canopy. Resource Concerns include Degraded Plant Condition - Undesirable Plant Productivity and Health, Inadequate Structure and Composition, Wildfire Hazard, Excessive Biomass Accumulation; Livestock Production Limitation - Inadequate Feed and Forage, and Inadequate Livestock Shelter.
After Practice Situation	The stand is thinned non-commercially to a basal area of 50 sq. ft. per acre, which will allow adequate sunlight to the forest floor for grass production, yet still provide shade and some protection from the elements for livestock and wildlife. Debris is removed, all tree cutting will leave the shortest possible stump height. The soil is prepared for planting using chemical and mechanical means, then a mix of native warm-season grasses will be established, providing forage to livestock and wildlife. All Resource Concerns listed above are addressed.
Scenario Feature Measure	Acres of silvopasture established
Scenario Unit	Acre
Scenario Typical Size	10

Cost Summary:

Cost Category	Scenario Cost	Scenario Cost/Unit
Materials	\$4,096.91	\$409.69
Equipment/Installation	\$748.26	\$74.83
Labor	\$2,208.36	\$220.84
Mobilization	\$0.00	\$0.00
Acquisition of Technical Knowledge	\$0.00	\$0.00
Foregone Income	\$0.00	\$0.00
Total	\$7,053.53	\$705.35

Cost Details:

Cost Category	Component ID	Component Name	Component Description	Unit	Price (\$/unit)	Quantity	Cost
Materials	73	Phosphorus, P2O5	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.96	500	\$480.00
Materials	334	Herbicide, Glyphosate	A broad-spectrum, non-selective systemic herbicide. Product is typically used in these practices 340, 645, 314, 666, and 512. Product Name: Roundup, Accord XRT, and Accord SP.	Acre	\$11.04	10	\$110.40
Materials	313	Tree Marking Paint	Trees to be cut through tree marking are physically identified through the application of paint on the tree. Typically one quart of paint is used to mark one acre of trees.	Acre	\$5.02	10	\$50.20
Materials	79	Little Blue Stem (Schizachyrium scoparium)	Native Grasses and shipping.	Pound	\$15.43	33	\$509.19
Materials	78	Indian Grass, Tomahawk (Sorghastrum nutans)	Native Grasses and shipping.	Pound	\$12.63	33	\$416.79
Materials	76	Big Blue Stem (Andropogon gerardii)	Native Grasses and shipping.	Pound	\$11.81	33	\$389.73
Materials	75	Lime, ENM	Fertilizer: Limestone Spread on field.	Ton	\$93.78	20	\$1,875.60
Materials	74	Potassium, K2O	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.53	500	\$265.00
Equipment/Installation	1100	Cultipacking	Includes all costs for equipment and power unit. labor included.	Acre	\$7.71	10	\$77.10
Equipment/Installation	960	Seeding Operation, No Till/Grass Drill	No Till drill or grass drill for seeding. Includes all costs for equipment, power unit, and labor.	Acre	\$19.08	2	\$38.16
Equipment/Installation	953	Lime application	Lime application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$8.37	10	\$83.70
Equipment/Installation	937	Chainsaw	Equipment and power unit costs. Labor not included.	Hour	\$5.48	60	\$328.80
Equipment/Installation	948	Chemical, ground application	Chemical application performed by ground equipment. Equipment and labor costs included.	Acre	\$6.50	10	\$65.00
Equipment/Installation	950	Fertilizer, ground application, dry bulk	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.92	10	\$59.20
Equipment/Installation	945	Tillage, Light	Includes light disking (tandem) or field cultivator. Equipment and power unit costs. Labor is included.	Acre	\$9.63	10	\$96.30
Labor	231	General Labor	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$25.71	60	\$1,542.60

Labor	235	Specialist Labor	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	\$83.22	8	\$665.76
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